

with other air-ground systems, including a statement as to whether the system will be interconnected with international air-ground systems.

(d) *Technical Exhibit.* A technical description of the proposed system demonstrating compliance with all applicable technical requirements and describing how the proposed system would operate, if authorized. This exhibit must provide the following information:

(1) The number of ground stations to be used, their locations, and the type and quantity of equipment proposed for the system;

(2) A complete description of the procedures and data protocols to be used on the control channel;

(3) The modulation types to be used and their spectral characteristics;

(4) The effective radiated power and transmitter peak envelope power for all transmitters at each ground station location, and the effective radiated power of the airborne mobile stations;

(5) Antenna information as follows:

(i) For airborne mobile stations, the antenna type(s) to be used;

(ii) For ground stations, vertical and horizontal radiation patterns, antenna heights above ground level, antenna support structure heights above ground level, ground elevation above mean sea level and any relevant information (e.g. FAA approval) that may be helpful in determining whether ground station antennas require marking and lighting;

(6) Analytical data, including calculations, of potential interference within and without the spectrum for the air-ground system;

(7) A statement in compliance with the National Environmental Policy Act of 1969. See §§1.1301 through 1.1319 of this chapter.

Subpart H—Cellular Radiotelephone Service

§ 22.900 Scope.

The rules in this subpart govern the licensing and operation of cellular radiotelephone systems. Licensing and operation of these systems are also subject to rules elsewhere in this part that apply generally to the Public Mobile Services. In case of conflict, however, the rules in this subpart govern.

§ 22.901 Cellular service requirements and limitations.

Cellular system licensees must provide cellular mobile radiotelephone service upon request to all cellular subscribers in good standing, including roamers, while such subscribers are located within any portion of the authorized cellular geographic service area (see § 22.911) where facilities have been constructed and mobile service to subscribers has commenced. A cellular system licensee may refuse or terminate service, however, subject to any applicable state or local requirements for timely notification to any subscriber who operates a cellular telephone in an airborne aircraft in violation of § 22.925 or otherwise fails to cooperate with the licensee in exercising operational control over mobile stations pursuant to § 22.927.

(a) *Service area information.* Licensees must inform prospective subscribers of the area in which reliable service can be expected.

(b) *Lack of capacity.* If a licensee refuses a request for cellular service because of a lack of system capacity, it must report that fact to the FCC in writing, explaining how it plans to increase capacity.

(c) *Dispatch service.* Cellular systems may provide dispatch service.

(d) *Alternative technologies and co-primary services.* Licensees of cellular systems may use alternative cellular technologies and/or provide fixed services on a co-primary basis with their mobile offerings, including personal communications services (as defined in Part 24 of this chapter) on the spectrum within their assigned channel block. Cellular carriers that provide mobile services must make such service available to subscribers whose mobile equipment conforms to the cellular system compatibility specification (see § 22.933).

(1) Licensees must perform or obtain an engineering analysis to ensure that interference to the service of other cellular systems will not result from the implementation of co-primary fixed services or alternative cellular technologies.

(2) Alternative technology and co-primary fixed services are exempt from the channeling requirements of § 22.905, the modulation requirements of § 22.915,

the wave polarization requirements of § 22.367, the compatibility specification in § 22.933 and the emission limitations of §§ 22.357 and 22.917, except for emission limitations that apply to emissions outside the assigned channel block.

[59 FR 59507, Nov. 17, 1994; 59 FR 64856, Dec. 16, 1994, as amended at 60 FR 15495, Mar. 24, 1995; 61 FR 38403, July 24, 1996; 61 FR 45356, Aug. 29, 1996]

§ 22.905 Channels for cellular service.

The following channels are allocated for block assignment in the Cellular Radiotelephone Service. All channels have a bandwidth of 40 kHz and are designed by their center frequencies in MegaHertz.

Base	Mobile	Base	Mobile
CHANNEL BLOCK A			
416 communication channel pairs			
869.040	824.040	890.010	845.010
869.070	824.070	890.040	845.040
879.990	834.990	891.480	846.480
21 control channel pairs			
	834.390	879.390	
	834.420	879.420	
	834.990	879.990	
CHANNEL BLOCK B			
416 communication channel pairs			
880.020	835.020	891.510	846.510
880.050	835.050	891.540	846.540
889.980	844.980	893.970	848.970
21 control channel pairs			
	835.020	880.020	
	835.050	880.050	
	835.920	880.620	

(a) Each channel block is assigned exclusively to one licensee for use in that licensee's cellular geographic service area (see § 22.911).

(b) Licensees may use any channel pair from the assigned channel block at any of their transmitter locations, subject to the prior coordination requirements of § 22.907.

[59 FR 59507, Nov. 17, 1994; 60 FR 9891, Feb. 22, 1995]

§ 22.907 Coordination of channel usage.

Licensees in the Cellular Radiotelephone Service must coordinate, with the appropriate parties, channel usage at each transmitter location within 121 kilometers (75 miles) of any transmitter locations authorized to other licensees or proposed by tentative selectees or other applicants, except those with mutually exclusive applications.

(a) Licensees must cooperate and make reasonable efforts to resolve technical problems that may inhibit effective and efficient use of the cellular radio spectrum; however, licensees are not obligated to suggest extensive changes to or redesign other licensees' cellular systems. Licensees must make reasonable efforts to avoid blocking the growth of other cellular systems that are likely to need additional capacity in the future.

(b) If technical problems are addressed by an agreement or operating arrangement between the licensees that would result in a reduction of quality or capacity of either system, the licensees must notify the FCC by letter.

§ 22.909 Cellular markets.

Cellular markets are standard geographic areas used by the FCC for administrative convenience in the licensing of cellular systems. Cellular markets comprise Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs). All cellular markets and the counties they comprise are listed in Public Notice Report No. CL-92-40 "Common Carrier Public Mobile Services Information, Cellular MSA/RSA Markets and Counties", dated January 24, 1992, DA 92-109, 7 FCC Rcd 742 (1992).

(a) *MSAs*. Metropolitan Statistical Areas are 306 areas, including New England County Metropolitan Areas and the Gulf of Mexico Service Area (water area of the Gulf of Mexico, border is the coastline), defined by the Office of Management and Budget, as modified by the FCC.

(b) *RSAs*. Rural Service Areas are 428 areas, other than MSAs, established by the FCC.